Manitoba Monthly Surveillance Unit Report
Reported up to August 31, 2010

Highlights:

1. **Antimicrobial Resistant Organisms**
   Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 64% of all non-STBBI related communicable diseases reported to Manitoba Health during August 2010.

   - The number of reported cases of MRSA was above the statistically expected range in August 2010 – 374 positive lab-confirmed cases reported; less than 350 expected in an average month.

2. **Sexually Transmitted & Blood-Borne Infections (STBBI)**
   There were 613 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in August 2010:
   - 511 reported cases of chlamydia (CT) only
   - 49 reported cases of gonorrhoea (GC) only
   - 40 reported co-infections of CT and GC and
   - 13 reported cases of syphilis

   Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 44% of all reported chlamydia cases in the province.

   The 13 syphilis cases in August 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

   In August 2010, there were no cases of Hepatitis B virus (HBV), 33 cases of Hepatitis C virus (HCV) and 6 cases of HIV newly reported in Manitoba.

3. **Other Communicable Diseases**
   The number of reported cases in August 2010 was within or below the statistically expected range for these reported communicable diseases with the exception of the following diseases:

   - Verotoxigenic E. coli – 42 positive lab-confirmed cases reported; less than 37 expected in an average month. This increase was due to a food borne outbreak that occurred within the Russian Pavilion during Folklorama, an annual multicultural festival celebrated in Winnipeg.
   - Listeria monocytogenes – 2 positive lab-confirmed cases reported; less than 2 expected in an average month.
   - Shigellosis – 7 positive lab-confirmed cases reported; less than 6 expected in an average month.

- Trichinosis – 2 positive lab-confirmed cases reported; less than 1 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during July, August, and September, 2005-2009.

Explanatory Notes:

General:

Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month. Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used will be the specimen collection date as symptom onset date is frequently not recorded. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

Disease specific information:

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

The number of Tuberculosis cases year-to-date may not equal the sum of cases reported for each month of this year. As new test results are received, there may be a change in diagnosis. Occasionally, diagnosis dates are updated, which also contributes to total numbers varying from month to month.

SUMMARY OF COMMUNICABLE DISEASE FOR August 2010

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2009	2010	Expected*	Ex. Range**	2009	2010
006.9	AMEBIASIS	3	1	2	0-5	28	26
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		1
005.8	B. CEREUS	3		0	0-2	5	
320.1	BAC. MENINGITIS - PNEUM			0	0-1	3	
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	17	15		***	113	92
116.0	BLASTOMYCOSIS				***	4	5
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-1	1	
005.2	C. PERFRINGENS		1	0	0-1	2	1
008.43	CAMPYLOBACTER	26	30	27	18-36	157	157
558.2	CLOSTRIDIUM DIFFICILE	55	48		***	563	580
046.1	CREUTZFELD-JACOB DISEASE				***	2	
007.8	CRYPTOSPORIDIOSIS	5	1	9	0-26	18	8
061.0	DENGUE FEVER			0	0-0		
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS			0	0-1	1	6
032	DIPHTHERIA CASES			0	0-0		4
123.4	DIPHYLLOBOTHRIUM SPP			1	0-4	1	6
008.0	E. COLI-VEROTOXIGENIC	8	42	10	0-36	30	70
054.3	ENCEPHALITIS			0	0-1		
005.9	FOOD POISONING OTHER			0	0-1		
007.1	GIARDIA LAMBLIA	19	11	14	5-23	87	75
320.0	H.INFLUENZAE (CSF)			0	0-0		1
041.5	H.INFLUENZAE (OTHER STERILE)	1		0	0-1	3	
041.59	HAEM. INFLUENZAE (non-B)		1		***	1	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-0		1
070.1	HEPATITIS A		2	1	0-3	11	4
070.3	HEPATITIS B			1	0-3	3	1
070.51	HEPATITIS C	27	33	27	18-36	244	216
487.1A	INFLUENZA A****				***	88	
487.1B	INFLUENZA B				***	38	
482.83	LEGIONELLA			0	0-1		4
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-1		
027.0	LISTERIA MONOCYTOGENES		2	0	0-1	2	3
088.81	LYME DISEASE			1	0-4		
084	MALARIA			1	0-3	7	7
055.9	MEASLES			0	0-0		1
036.0	MENINGOCOCCAL CSF			0	0-0		
036.82	MENINGOCOCCAL ARTHROPATHY				***		2
036.2	MENINGOCOCCEMIA BLOOD			0	0-0		4
B95.6	MRSA	302	374	218	87-349	1647	2179
072.9	MUMPS			1	0-3	5	2
036.89	N.MENINGITIDIS OTHER	1		0	0-1	5	
728.86	NECROTIZING FASCIITIS		1	1	0-4	3	9
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-1		
033.1	PARAPERTUSSIS				***		
033.0	PERTUSSIS	5	5	2	0-7	24	41
038.2	PNEUM. SEPTICEMIA	4	9	6	0-12	75	96
073.9	PSITTACOSIS			0	0-0		

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years.
** Mean +/- 2 standard deviations of the mean.
*** Data collected for less than 5 years.
**** Excludes Influenza A Pandemic H1N1 (pH1N1). There were no cases of pH1N1 in August 2010.

SUMMARY OF COMMUNICABLE DISEASE FOR August 2010

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2009	2010	Expected*	Ex. Range**	2009	2010
083.0	Q FEVER			0	0-0	1	4
082.0	RICKETTSIA RICKETTSII				***		1
056.9	RUBELLA			0	0-0	2	2
771.0	RUBELLA CONGENTIAL			0	0-0		
041.2	S.PNEUM.OTHER	4		1	0-3	8	11
003.0	SALMONELLA	29	25	18	6-30	174	163
120	SCHISTOSOMIASIS			0	0-1		
004	SHIGELLOSIS		7	2	0-5	16	27
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***		
481.9	STREP PNEUMONIA - PR			0	0-1		
041.1	STREP PYOGENES - OTHER	11	10		***	66	62
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		
481	STREPTOCOCCUS PNEUMONIAE			0	0-1		
127.2	STRONGYLOIDES		1	1	0-3	5	11
037	TETANUS			0	0-1		1
130.9	TOXOPLASMOSIS			0	0-0	1	2
124	TRICHINOSIS		2	0	0-0		2
086	TRYPANOSOMA CRUZI			0	0-1		3
013	TUBERCULOSIS - NON-RESP.	6	1	2	0-6	21	24
010	TUBERCULOSIS - PRIM.	2	2	1	0-3	8	6
011	TUBERCULOSIS - RESP	14	12	9	1-17	83	66
021.9	TULAREMIA			0	0-1	1	1
002.0	TYPHOID			0	0-1	1	3
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	10	18		***	54	208
005.4	VIBRIO PARAHAEMOLYTICUS		1		***		2
070.59	VIRAL HEP. OTHER				***		2
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA			2	0-5	4	4
		552	**655**			**3616**	**4208**

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years.
** Mean +/- 2 standard deviations of the mean.
*** Data collected for less than 5 years.

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR AUGUST 2010

		<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing Age/Gender	Total
ICD9	Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
006.9	AMEBIASIS									1																			1
038.0	BETA STREP SEPTICEMIA		1	1											1			1	1	1	2	1	1	1	1		3		15
005.2	C. PERFRINGENS																				1								1
008.43	CAMPYLOBACTER					1		2	1		3	2	3			1	1		4	2	4	1	3			1	1		30
558.2	CLOSTRIDIUM DIFFICILE											2		2		1	1		1	6	3	5	3	4	3	11	6		48
007.8	CRYPTOSPORIDIOSIS													1															1
008.0	E. COLI 0157	1		2	4		3		1	2	4	2	4	1		3	1	1	1	2		5	2	1		2			42
007.1	GIARDIA LAMBLIA				1	4	1			1				1						2			1						11
041.59	HAEM. INFLUENZAE (non-B)				1																								1
070.1	HEPATITIS A										1									1									2
070.51	HEPATITIS C											2		1	4	3	4		7	4	4		2		1			1	33
027.0	LISTERIA MONOCYTOGENES																							2					2
B95.6	MRSA	2	2	25	16	19	17	13	17	16	14	11	16	14	21	18	29	15	20	19	15	6	8	5	11	15	10		374
728.86	NECROTIZING FASCIITIS															1													1
033.0	PERTUSSIS	3	2																										5
038.2	PNEUM. SEPTICEMIA	1		1	1						1					2	1			1			1						9
003.0	SALMONELLA				1		2	1	1	2		1		2		1	1	1	4	2	2	1	3						25
004	SHIGELLOSIS			1	1	2						1			1					1									7
041.1	STREP PYOGENES - OTHER ST													1			3	1				2	1		2				10
127.2	STRONGYLOIDIASIS																1												1
124	TRICHINOSIS																1		1										2
013	TUBERCULOSIS - NON-RESP.																					1							1
010	TUBERCULOSIS - PRIM.			1		1																							2
011	TUBERCULOSIS - RESP					1							1				3		1			2	2				2		12
B96.8	VANCOMYCIN RES. ENTER.															1	1	1	1	2	2	1	1	1	3	3	1		18
005.4	VIBRIO PARAHAEMOLYTICUS																	1											1
		7	5	31	25	28	23	16	20	22	23	21	24	23	27	31	47	21	41	43	33	25	28	14	21	32	23		655

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR AUGUST 2010

ICD9	Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP**	Missing	TOTAL
	*Case Referred to:**			*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
006.9	AMEBIASIS	1																					1
038.0	BETA STREP SEPTICEMIA	12		1									1					1					15
005.2	C. PERFRINGENS																	1					1
008.43	CAMPYLOBACTER	18	1		1		5						4		1								30
558.2	CLOSTRIDIUM DIFFICILE	36	1		3		2		1		1		2					2					48
007.8	CRYPTOSPORIDIOSIS	1																					1
008.0	E. COLI 0157	32					3				6		1										42
007.1	GIARDIA LAMBLIA	5	3										2						1				11
041.59	HAEM. INFLUENZAE (non-B)																	1					1
070.1	HEPATITIS A	2																					2
070.51	HEPATITIS C	22	2		1		2		2	1	1				2								33
027.0	LISTERIA MONOCYTOGENES	1									1												2
B95.6	MRSA	95	3	4	6		8	1	9		11		5	5	8	3	23	185	7	1			374
728.86	NECROTIZING FASCIITIS	1																					1
033.0	PERTUSSIS	1						3										1					5
038.2	PNEUM. SEPTICEMIA	4							1									4					9
003.0	SALMONELLA	10	3	1	1		2		3		3		2										25
004	SHIGELLOSIS	2											1					4					7
041.1	STREP PYOGENES - OTHER ST	6	1							1								1	1				10
127.2	STRONGYLOIDIASIS	1																					1
124	TRICHINOSIS	2																					2
013	TUBERCULOSIS - NON-RESP.	1																					1
010	TUBERCULOSIS - PRIM.	1																1					2
011	TUBERCULOSIS - RESP	6								1								5					12
B96.8	VANCOMYCIN RES. ENTER.	14			1						2		1										18
005.4	VIBRIO PARAHAEMOLYTICUS												1										1
		274	14	6	13		22	4	16	3	25		20	5	11	3	23	206	9	1			655

* F=Federal Jurisdiction (First Nations and Inuit Health); P=Provincial Jurisdiction

** OOP=Out of Province

STBBI Infection Summary Report - August 2010

	MONTHLY TOTAL		YEAR-TO-DATE	
DISEASE/INFECTION	2009	2010	2009	2010
All Chlamydia Infections	468	551	4304	4311
All Gonorrhea Infections (including PRNG)	83	89	754	663
All Syphilis Infections*	3	13	33	53
Gonorrhea & Chlamydia Co-infections	36	40	318	296
HIV	10	6	77	87

Total Number of STBBI Cases by Age and Gender - August 2010

	<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing	
Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	age/gender	TOTAL
Chlamydia Only Cases							4		112	40	112	59	57	34	36	28	11	8	2	5		2	1					511
Gonorrhea Only Cases									7	1	6	7	5	4	6	6	2	3			1	1						49
Syphilis Only Cases												1				4	1	2		2		1	1			1		13
GC and CT Cases									13	4	6	4	3	4	1	3			1	1								40
TOTAL							4		132	45	124	71	65	42	43	41	14	13	3	8	1	4	2			1		613
HIV														1	2	2		1										6

Regional STBBI Distribution - August 2010

Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP***	Missing	TOTAL
*Case Referred to:***			*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
All Chlamydia Infections	286	20	10	14		15	4	8		26		10	5	14	4	31	80	20		4		551
All Gonorrhea Infections	45	2	2	1			1	2		1			1	1		3	23	6		1		89
All Syphilis Infections	11									2												13
GC and CT Infections	17		1	1			1	1		1				1		1	13	3				40

* The 13 cases in August 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

** F=Federal Jurisdiction (First Nations and Inuit Health); P=Provincial Jurisdiction

*** OOP=Out of Province